

## **REMARKS**

Applicants have received the Office Action dated August 30, 2006, in which the Examiner: 1) rejected all the claims as allegedly anticipated by Nielson et al. (U.S. Pat. No. 6,081,665, hereinafter Nielsen).

With this Preliminary Amendment, Applicants amend claims 1, 3, 5-8, 15-16 and 21-22, cancel claims 9-14 and 22-23, and present new claims 26-30.

### **I. CLAIM CANCELLATIONS**

With this Preliminary Amendment, Applicants cancel claims 9-14 and 23-24 in order to narrow the issues before the Examiner. These cancellations are without prejudice to later asserting the claims, such as in a continuation application.

### **II. ART-BASED REJECTIONS**

Nielsen is directed to a method for efficient soft real-time execution of portable byte code computer programs. (Nielsen Title). In particular, Nielsen discloses using multiple stacks to help ensure meeting real-time executing constraints. (Nielsen Abstract). With respect to garbage collector, Nielsen teaches that the garbage collection runs interleaved on the same processor as byte code computer program.

To support real-time performance, garbage collection runs asynchronously, meaning that the garbage collection thread interleaves with application code in an arbitrary order.

(Nielsen Col. 18, lines 58-60).

Claim 1, by contrast, specifically recites, "a first processor that executes a first program; a counter coupled to the memory device and the first processor, wherein a value of the counter is indicative of memory consumption of memory of the memory device by the first program; a second processor coupled to the memory device, the second processor executes a garbage collector to free a portion of unused memory in the memory device; and wherein executing the garbage collector by the second processor is triggered based on the value of the counter." Applicants respectfully submit that Nielsen does not expressly or inherently teach such a system. In particular, in Nielsen it appears that the

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garbage collector, and the programs for which garbage collection is performed, execute on the same processor. Thus Nielsen fails to expressly or inherently teach the limitations of claim 1, and claim 1-8 should be allowed.

Likewise, Claim 15 recites, "a first processor that executes a garbage collector to free unused memory resources within a memory device; a second processor coupled to the first processor and the memory that executes a program that allocates memory within the memory device; a counter coupled to the first and second processors, wherein the counter indicates memory consumption for the program; and wherein upon surpassing a threshold value, the counter triggers the garbage collector." Here again, in the Nielsen system it appears that the garbage collector and the programs for which garbage collection is performed, execute on the same processor. Thus, Nielsen fails to expressly or inherently teach the limitations of claim 15, and claims 15-22 and 25 should be allowed.

**III. NEW CLAIMS**

With this Preliminary Amendment, Applicants present new claims 26-30. Applicants respectfully submit that these claims are likewise allowable over Nielsen.

**IV. CONCLUSION**

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are

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hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to the Texas Instruments, Inc. Deposit Account No. 20-0668.

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